Remarks:

In the Office Action dated December 13, 2007, claims 1-32, in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 1, 8, 9, and 15-32 remain in this application and claims 2-7 and 10-14 have been canceled.

Claims 1-32 were provisionally rejected under the judicially created doctrine of obviousness type double patenting. Since the conflicting claims have not yet been patented, applicants request that this provisional rejection be held in abeyance until one of the applications issues.

Claims 1-33 were rejected under 35 USC §102(b) as anticipated by Sievernich (CA 2,334,955 corresponding to WO99/65314). Sievernich generically discloses synergistic herbicidal mixtures, comprising

A) at least one 3-heterocyclyl-substituted benzoyl derivative of the formula I; and

B) a synergistically effective amount of at least one herbicidal compound from the group comprising certain herbicide classes.

Sievernich teaches as preferred component A) on page 24, lines 42 to 44 of WO99/65314, 442-methyl-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonyl- benzoyl]-1-methyl-5-hydroxy-1 H-pyrazole (Ia.33). Inter alia, on page 39, lines 19 to 39 certain imidazolinones are disclosed as potential component B). Inter alia, tables 11 and 12 provide experimental data for binary herbicidal mixtures comprising 4-[2-methyl-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonyl- benzoyl)-1-methyl-5-hydroxy-1 H-pyrazole and imazapyr.

However, quaternary synergistic herbicidal mixtures, comprising 4-[2-methyl-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonyl- benzoyl]-1-methyl-5-hydroxy-1 H-pyrazole and two herbicides selected from the group including imazapyr, imazaquin, imzethabenz-methyl, imazamox, imazapic and imazethapyr and a fourth herbicidal compound are not disclosed or suggested in Sievernich.

In addition, applicants point out that one skilled in the art would not have been able to make and use the presently claimed invention in view of Sievernich, as there was no indication as to how to select the inventive components B) from the wide range of potential mixing partners and to choose an additional fourth component C). Sievernich lists a very large number of possible herbicides which can be used in a mixture with the 3-heterocyclyl-substituted benzoyl derivatives of formula I. Courts have found that references which list large numbers of possible species do not always anticipate every species disclosed. The MPEP § 2131.02 states that:

> "When the compound is not specifically named, but instead it is necessary to select portions of teachings within a reference and combine them, e.g., select various substituents from a list of alternatives given for placement at specific sites on a generic chemical formula to arrive at a specific composition, anticipation can only be found if the classes of substituents are sufficiently limited or well delineated. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990)."

In the present situation, the number of disclosed herbicides is very large and

thus one skilled in the art would need to pick from numerous herbicides to arrive at the present invention and there is no suggestion that imazapyr, imazaquin, imazamethabenz-methyl, imazamox, imazapic and imazethapyr are preferred. Therefore, the disclosure of a large number of possible herbicides in CA 2,334,955 does not anticipate the present claims which recite specific herbicides which produce a synergistic effect when mixed with 4-[2-methyl-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonyl- benzoyl]-1-methyl-5-hydroxy-1 H-pyrazole.

Sievernich teaches that compounds of formula I can be mixed with certain other herbicidal compounds and exemplary, synergistic activity is proven for a number of binary mixtures of compounds of formula I with herbicides selected from the groups B1 to B16. Sievernich also teaches synergistic ternary mixtures of compounds of formula I with:

table 76: nicosulfuron (B2) + dicamba (B14)

table 77+78: diflufenzopyr (B5) + dicamba (B14)

table 79: dimethenamide (B9) + atrazine (B12)

table 80: bentazone (B12) + atrazine (B12)

table 81+82: atrazine (B12) + dicamba (B14).

The only combination comprising an imidazolinone compound is a binary mixture of 4-[2-methyl-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonyl- benzoyl]-1-methyl-5-hydroxy-1 H-pyrazole and imazapyr (tables 11 and 12). Therefore, there is no motivation for a man skilled in the art to use other mixtures than those exemplified as synergistic mixtures by Sievernich. In fact, this document teaches away from quaternary mixtures comprising two imidazolinones as component B), as none of the mixtures disclosed by

Sievernich contain more than one imidazolinone as component B). Moreover, not a single quaternary mixture is disclosed.

Thus, one skilled in the art looking for synergistic multi-mixtures at most would consider other ternary mixtures based on the binary mixtures exemplified in Sievernich. Due to the complex interactions of different active ingredients, there is no reason for one skilled in the art, having a wide selection of synergistically effective binary and ternary mixtures at his disposal, to take a risk with random quaternary mixtures from the generic disclosure. In contrast to Sievernich, claim 1 is directed to synergistic herbicidal mixtures comprising components A), B) and C). Component A) has been amended to 4-[2-methyl-3-(4,5-dihydroisoxazol-3-yl)-4-methylsulfonyl- benzoylj-1-methyl-5-hydroxy-1 H-pyrazole (table 1, la.29 and original claim 7), which is identified as preferred component A) on page 19, lines 6 to 8 of the description and which was used as component A) in all biological examples (see tables 3 to 17). Usually, a synergistic effect cannot be predicted from the herbicidal activity of the individual components as adverse effects may arise. The present invention provides an herbicidal mixture, a combination of four active ingredients, which provides control over unwanted weeds with an efficacy that significantly outperforms the efficacy that could have been expected from adding up the efficacy of the individual components. As shown in examples 3 to 17 of the present application, mixtures comprising components A), B) and C) demonstrate a significant synergistic effect. One skilled in the art is able to determine the required amount of each herbicide to address the specific problem in the field. By providing examples for the inventive mixtures demonstrating a substantial increase in activity over the additive effects at different application rates, with different mixing ratios and for a wide variety of important

weeds, the present invention is supported in a way that enables one skilled in the art to use the invention.

Applicants respectfully point out that the subject matter of the pending application is not effective but synergistic herbicidal mixtures. Support for these claims is provided by the respective experimental data. The Colby-value, which stands for the calculated additive effect, has to be compared to the observed effect (damage [%]). The data prove that the inventive mixtures result in a more than simply additive effect. As this is not predictable, the results are surprising and thus would not have been anticipated or obvious in view of the prior art. One skilled in the art would not have guessed or known which of the innumerable potential combinations from a generic disclosure or other prior art would show synergistic activity and not detrimental effects. In view of the above discussion, applicants request that this rejection be withdrawn.

Regarding the relationship between application rate and synergism as discussed in the office action, applicants point out that these two parameters do not necessarily depend on each other. Normally, the application rate of an herbicide correlates with the damage observed in the undesired vegetation. As herbicides interfere with essential metabolic pathways, higher damage can be expected with higher application rates, unless e.g. salvage pathways or other defensive mechanisms exist. The concentration [g/l] of the herbicide applied is not relevant as the application rate [g/ha] in the field also depends on the e.g. spray volume [l]. Thus, the only meaningful parameter for assessing the herbicidal activity is the application rate. One skilled in the art, with knowledge of the inventive mixture, will be able to determine the optimal application rate and mixing ratio for the conditions prevailing in his field (soil and weather conditions, crop, unwanted

vegetation, etc.).

Applicants respectfully submit that all of claims 1, 8, 9, and 15-32 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

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